

REMARKS

Claims 1-22 and 24-28 are currently pending in the application. By this amendment, claims 1, 11, 14, 17 and 18 are amended and claims 28 and 29 are added for the Examiner's consideration. The above amendments and new claims do not add new matter to the application and are fully supported by the specification. For example, support for the amendments and new is provided in Figure 1 and paragraphs [0046] and [0047] of the instant published application 2003/0155213. Reconsideration of the rejected claims in view of the above amendments and the following remarks is respectfully requested.

35 U.S.C. §102 Rejection

Claims 1-9, 11, 14, 15, 18-22 and 24-26 were rejected under 35 U.S.C. §102(b) for being anticipated by U. S. Patent No. 2,993,583 (incorrectly indicated as 3,993,583) issued to SYKES. This rejection is respectfully traversed.

Independent Claims 1, 11, 14 and Dependent Claims 2-7, 9, 15, 24 and 26

Applicant respectfully submits that SYKES does not disclose or suggest the combination of features recited in at least amended claims 1, 11 and 14.

Claim 1 recites, inter alia:

wherein the movable diverting mechanism is capable of remaining in a static position allowing the item to pass through the package divert mechanism while moving along the original direction.

Claim 11 recites, inter alia:

a control system that determines information from the item and predetermines a diverting direction for the item,

wherein the item is moved with the movable diverting mechanism in the first direction based on a first control signal and in the second direction based on a second control signal.

Claim 14 recites, inter alia:

a means for positioning the movable blade member in a static position allowing the item to pass through the bidirectional divert mechanism.

Applicant does not dispute that SYKES discloses a conveyor diverter which has a frame with an entrance and exits, and which utilizes a movable diverting blade 110 (see Fig. 18 and col. 17, lines 15-32). However, it is clear from col. 18, lines 8-15 of SYKES that the disclosed diverter system utilizes a selector switch 136 to control whether the diverter diverts the packages to either the left or the right sides. It is also clear from the figures of SYKES that the packages cannot pass through the diverting mechanism. Indeed, in each disclosed embodiment, the packages are never allowed to pass through the diverting mechanism.

The invention, in contrast, provides that the movable diverting mechanism is capable of remaining in a static position allowing the item to pass through the package divert mechanism while moving along the original direction (claim 1) and/or provides for a means for positioning the movable blade member in a static position allowing the item to pass through the bidirectional divert mechanism (claim 14). This is simply not disclosed in SYKES and the Examiner has not demonstrated otherwise.

The invention also provides for a control system that determines information from the item and predetermines a diverting direction for the item, wherein the item is moved with the movable diverting mechanism or blade member in the first direction based on a first control signal and in the second direction based on a second control signal (claim

11). Clearly, a selector switch is not a control system that determines information from the item and predetermines a diverting direction for the item. Nor is the disclosed selector switch even remotely capable of moving the item with the movable diverting mechanism or blade member in the first direction based on a first control signal and in the second direction based on a second control signal.

Accordingly, Applicant respectfully requests reconsideration and withdrawal of the rejection of claims 1, 11 and 14. Applicant further submits that each of claims 2-7, 9, 15, 24 and 26 is allowable at least for depending from claims 1 and 14, as well as for additional reasons related to their own recitations.

Independent Claim 8 and Dependent claim 25

Applicant also disagrees that SYKES discloses or suggests "an over current sensor for determining whether a current associated with an actuator exceeds a threshold limit", as recited in claim 8.

While the Examiner has identified reference numbers 28R and 28L as the recited overcurrent sensor, it is clear from a fair reading of SYKES that the Examiner is not correct. SYKES clearly states at col. 5, lines 8-11 and col. 6, lines 34-37 that the sensors 28L and 28R are limit switches which open and close a circuit and not overcurrent sensors that determine whether a current associated with an actuator exceeds a threshold limit. The Examiner has simply failed to point to any language in SYKES which discloses or suggests this feature.

Thus, it is clear that contrary to the Examiner's assertions, SYKES does not disclose or suggest an "over current sensor", let alone an "over current sensor for

determining whether a current associated with an actuator exceeds a threshold limit".

Accordingly, Applicant respectfully requests reconsideration and withdrawal of the rejection of claim 8, and further requests that the rejection of dependent claim 25 also be withdrawn.

Independent Claim 18 and Dependent Claims 19-21

Applicant also respectfully submits that SYKES does not disclose or suggest controlling, with control signals received from a controller of a conveyor, the diverting mechanism in accordance with the diverting direction to divert an item in either the first frame exit or the second frame exit, as recited in claim 18.

Again, Applicant does not dispute that SYKES discloses a conveyor diverter which has a frame with an entrance and exits, and which utilizes a movable diverting blade 110 (see Fig. 18 and col. 17, lines 15-32). However, it is clear from col. 18, lines 8-15 of SYKES that the disclosed diverter system utilizes a selector switch 136 to control whether the diverter diverts the packages to either the left or the right sides. The invention, in contrast, provides for controlling, with control signals received from a controller of a conveyor, the diverting mechanism in accordance with the diverting direction to divert an item in either the first frame exit or the second frame exit. Clearly, a selector switch is not capable of controlling, much less with control signals received from a controller of a conveyor, the diverting mechanism in accordance with the diverting direction to divert an item in either the first frame exit or the second frame exit.

Accordingly, Applicant respectfully requests reconsideration and withdrawal of the rejection of claim 18. Applicant further submits that claims 19-21 are allowable at

least for depending, directly or indirectly, from an allowable independent claim 18, as well as for additional reasons related to their own recitations.

Independent Claim 22

Applicant further also submits that SYKES does not disclose or suggest the combination of features of claim 22, and in particular, suspending the movement of the diverting mechanism based on at least one of a detection of an item being jammed, a detection of an item exceeding a threshold physical characteristic limit, a detection that the diverting mechanism exceeds a travel limit, and a detection that an operator has open access to the diverting mechanism.

Applicant does not dispute that SYKES discloses the use of sensors. Indeed, Applicant acknowledges that SYKES discloses the use of limit switches 28L and 28R and detector switches 47L, 47R, 51L, 51R, 126L, 126R, 131L and 131R. However, such sensors are not disclosed as suspending the movement of the diverting mechanism based on at least one of a detection of an item being jammed, a detection of an item exceeding a threshold physical characteristic limit, a detection that the diverting mechanism exceeds a travel limit, and a detection that an operator has open access to the diverting mechanism. Nor has the Examiner demonstrated otherwise. Finally, Applicant submits that SYKES does not disclose or suggest any reason for suspending movement of the diverter plate 110 based on the above-recited conditions.

Accordingly, Applicant respectfully requests reconsideration and withdrawal of the rejection of claim 22.

In view of the herein-contained amendments and remarks, Applicant respectfully

requests that the rejection of claim 22 under 35 U.S.C. §102 be withdrawn.

35 U.S.C. §103 Rejections

Independent claims 12 and 17

Claims 12 and 17 were rejected under 35 U.S.C. §103(a) for being unpatentable over SYKES in view of U. S. Patent No. 3,246,733 issued to Torbet, et al. ("TORBET"). This rejection is respectfully traversed.

While acknowledging that SYKES fails to disclose the recited hoods, the Examiner nevertheless asserts that TORBET discloses the use of hoods and that it would have been obvious to modify the arrangement of SYKES to utilize the safety hoods 26 shown in TORBET. Applicant respectfully disagrees.

Claim 12 specifically recites hoods having openings and being positioned at an entrance and at each exit of the frame. Moreover, claim 17 recites a safety hood positioned at least at one of the entrance and exits of the frame in combination with a control system that determines information from an item and predetermines a diverting direction for the item.

These features are not disclosed or suggested by any proper combination of SYKES and TORBET.

As acknowledged by the Examiner, SYKES lacks any hoods.

Moreover, while the Examiner has identified reference 26 in TORBET as the recited hoods, it is clear that the so-called hoods 26 are disclosed on TORBET as a housings "which serve merely to enclose the mechanism" M (see col. 2, lines 44-47). Such disclosure is hardly suggestive of hoods having openings and being positioned at

an entrance and at each exit of the frame and/or of a safety hood positioned at least at one of the entrance and exits of the frame. Nor has the Examiner demonstrated otherwise.

Additionally, Applicant submits that each of SYKES and TORBET lacks any disclosure with regard to a control system that determines information from an item and predetermines a diverting direction for the item. Nor has the Examiner demonstrated otherwise.

Furthermore, even if one could properly characterize the housing 26 as a hood, the Examiner has failed to appreciate that TORBET does not disclose placing a hood 26 at an entrance and/or at one or more of the exits of a frame. Accordingly, the combination of SYKES and TORBET would not result in the invention recited in the above-noted claims.

In view of the actual disclosure of TORBET, Applicant submits that TORBET fails to provide the requisite motivation for modifying SYKES. While the Examiner has alleged that it would have been obvious to modify SYKES in view of the teachings of TORBET "in order to provide for a safety feature for the conveyor system", the Examiner has failed to identify any language in TORBET disclosing or suggesting that the housings 26 are usable as either hoods having openings and being positioned at an entrance and at each exit of the frame and/or of a safety hood positioned at least at one of the entrance and exits of the frame. Thus, as the noted motivation cannot be found in the applied documents, it is apparent that the only motivation to modify SYKES in the manner necessary to obtain the invention recited in claims 12 and 17 is the Examiner's

improper hindsight.

For the above-noted reasons, Applicant respectfully requests that the rejection of claims 12 and 17 over SYKES in view of TORBET be withdrawn.

Claims 13 and 27

Claims 13 and 27 were rejected under 35 U.S.C. §103(a) for being unpatentable over SYKES in view of TORBET and further in view of U. S. Patent No. 6,036,128 issued to CRAMER ("CRAMER"). This rejection is respectfully traversed.

Claim 13 depends from claim 12 and claim 27 depends from claim 1. As claims 12 and 1 are allowable for the reasons noted above, Applicant submits that claims 13 and 27 are allowable at least because they depend from claims 12 and 1.

Applicant also submits that CRAMER does not cure the above-noted deficiencies of SYKES and TORBET. For example, CRAMER does not disclose or suggest a control system that determines information from the item and predetermines a diverting direction for the item, wherein the item is moved with the movable diverting mechanism in the first direction based on a first control signal and in the second direction based on a second control signal as recited in claim 1. CRAMER is also silent with regard to hoods having openings and being positioned at an entrance of each exit of the frame as recited in claim 12. As none of the applied documents disclose or suggest at least these features, claims 13 and 27 are allowable at least because claims 1 and 12 are not rendered unpatentable over the asserted combination of documents.

For the above-noted reasons, Applicant respectfully requests that the rejection of claims 13 and 27 over SYKES in view of TORBET and CRAMER be withdrawn.

Claim 16

Claim 16 was rejected under 35 U.S.C. §103(a) for being unpatentable over SYKES in view of U. S. Patent No. 6,189,702 issued to BONNET. This rejection is respectfully traversed.

Claim 16 depends from claim 15 and claim 14. As claims 15 and 14 are allowable for the reasons noted above, Applicant submits that claim 16 is allowable at least because it depends from claims 15 and 14.

Applicant also submits that BONNET does not cure the above-noted deficiencies of SYKES. For example, BONNET does not disclose or suggest a control system that determines information from the item and predetermines a diverting direction for the item, wherein the item is moved with the movable blade member in the first direction based on a first control signal and in the second direction based on a second control signal as recited in claim 14.

As none of the applied documents disclose or suggest at least these features, claim 16 is allowable at least because claims 15 and 14 are not rendered unpatentable over the asserted combination of documents.

For the above-noted reasons, Applicant respectfully requests that the rejection of claim 16 over SYKES in view of BONNET be withdrawn.

Independent claim 10

Claim 10 was rejected under 35 U.S.C. §103(a) for being unpatentable over SYKES in view of U. S. Patent No. 6,769,536 to LUTZ. This rejection is respectfully traversed.

While acknowledging that SYKES fails to disclose the recited modular frame, the Examiner nevertheless asserts that LUTZ discloses a modular frame and that it would have been obvious to modify the arrangement of SYKES to utilize the modular frame of LUTZ. Applicant respectfully disagrees.

Claim 10 specifically recites a plurality of sensors associated with the moveable diverting mechanism, wherein the plurality of sensors include: at least one home sensor for detecting a home position of the moveable diverting mechanism; and at least one over travel sensor for detecting an over travel position of the moveable diverting mechanism; and a plurality of sensors associated with the modular frame for detecting a flow of the items entering an entrance of the modular frame and exiting an exit of the modular frame.

These features are not disclosed or suggested by any proper combination of SYKES and LUTZ.

As acknowledged by the Examiner, SYKES lacks the modular frame.

Moreover, while the Examiner has identified the disclosed adjustable frame of LUTZ as the recited modular frame, the Examiner has failed to identify any language in either SYKES or LUTZ which discloses at least one home sensor for detecting a home position of the moveable diverting mechanism, much less, at least one over travel sensor for detecting an over travel position of the moveable diverting mechanism and a plurality of sensors associated with the modular frame for detecting a flow of the items entering an entrance.

As explained above, SYKES merely discloses the use of limit switches 28L and

28R and detector switches 47L, 47R, 51L, 51R, 126L, 126R, 131L and 131R. However, such sensors are not disclosed as at least one home sensor for detecting a home position of the moveable diverting mechanism, much less, at least one over travel sensor for detecting an over travel position of the moveable diverting mechanism and a plurality of sensors associated with the modular frame for detecting a flow of the items entering an entrance.

Furthermore, even if one could properly characterize the frame in LUTZ as a modular frame, the Examiner has failed to appreciate that LUTZ does not disclose that the frame can be used with a diverter, much less, one which utilizes at least one home sensor for detecting a home position of the moveable diverting mechanism, much less, at least one over travel sensor for detecting an over travel position of the moveable diverting mechanism and a plurality of sensors associated with the modular frame for detecting a flow of the items entering an entrance. Accordingly, the combination of SYKES and LUTZ would not result in the invention recited in the above-noted claims.

In view of the actual disclosure of LUTZ, Applicant submits that LUTZ fails to provide the requisite motivation for modifying SYKES. While the Examiner has alleged that it would have been obvious to modify SYKES in view of the teachings of LUTZ "in order to provide for adjustable frame members within the conveyor system", the Examiner has failed to appreciate the fact that frame adjustability has nothing to do with whether a frame is modular and says nothing about at least one home sensor for detecting a home position of the moveable diverting mechanism, much less, at least one over travel sensor for detecting an over travel position of the moveable diverting

mechanism and a plurality of sensors associated with the modular frame for detecting a flow of the items entering an entrance.

Thus, as the noted motivation cannot be found in the applied documents, it is apparent that the only motivation to modify SYKES in the manner necessary to obtain the invention recited in claim 10 is the Examiner's improper hindsight.

For the above-noted reasons, Applicant respectfully requests that the rejection of claim 10 over SYKES in view of LUTZ be withdrawn.

New Claims are also Allowable

Applicant submits that the new claims 28 and 29 are allowable over the applied art of record. Specifically, claims 28 and 29 depend from claims 1 and 14 which are believed to be allowable. Moreover, claims 28 and 29 recite a combination of features which are clearly not disclosed or suggested by the applied art of record. Accordingly, Applicant respectfully requests consideration of these claims and further requests that the above-noted claims be indicated as being allowable.

CONCLUSION

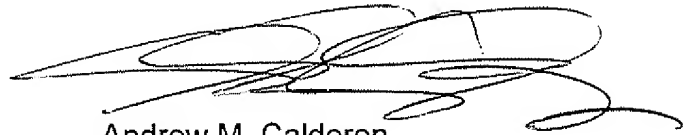
In view of the foregoing amendments and remarks, Applicant submits that all of the claims are patentably distinct from the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue. The Examiner is invited to contact the undersigned at the telephone number listed below, if needed. Applicant hereby makes a written conditional petition for

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Serial No.: 10/076,347

extension of time, if required. Please charge any deficiencies in fees and credit any overpayment of fees to Deposit Account No. 19-0089.

Respectfully submitted,
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A handwritten signature in black ink, appearing to read "Andrew M. Calderon", with a stylized flourish at the end.

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